AMENDMENTS TO THE SPECIFICATION

Please amend the Title of the Invention as follows:

~~IMAGE SIGNAL DATA STRUCTURE, IMAGE CODING METHOD, AND IMAGE DECODING METHOD~~ IMAGE SIGNAL, DECODING METHOD, DECODING APPARATUS, DATA STORAGE MEDIUM, AND COMPUTER PROGRAM IMPLEMENTING A DISPLAY CYCLE IDENTIFIER

Please add the following paragraph to page 1 after the Title of the Invention:

This is a Divisional Application of U.S. Application Serial No. 09/824,207, filed April 3, 2001, which is a Divisional Application of U.S. Application Serial No. 09/176,953, filed October 22, 1998, which is now U.S. Patent No. 6,654,541.

Please amend the paragraph beginning on line 6 of page 2 as follows:

When the data quantity of each information medium described above is estimated as a quantity of digital data, in the case of characters, the data quantity for each character is 1~2 byte. However, in the case of speech, the data quantity is 64 kbits per second (quality for telecommunication) and, in the case of moving picture, it is more than 100 Mbits per second (quality for current television broadcasting). ~~So~~ Thus, in the information media such as televisions, it is not practical to process such massive data as it is in a digital format. For example, although visual telephones have already been put to practical use by ISDN (Integrated Services Digital Network) having a transmission rate of 64 kbps~1.5 Mbps, it is impossible to transmit an image of a television camera as it is by the ISDN.

Please amend the paragraph beginning on line 19 of page 2 as follows:

~~So~~ As a result, data compression technologies are demanded. In the case of visual telephones, a moving picture compression technology standardized as H.261 by ITU-T (International Telecommunication Union-Telecommunication Sector) is employed. Further, according to a data

compression technology of MPEG1, it is possible to record image data, together with audio data, in an ordinary music CD (compact disk).

Please amend the paragraph beginning on line 10 of page 3 as follows:

In the image signal compression and expansion technologies according to MPEG1 and MPEG2 which have already been put to practical use, only a fixed frame rate is basically employed, namely, intervals between image display timings of the respective frames are regular. ~~So~~ As a result, there are only several kinds of frame rates, and in MPEG2 a frame rate designated by a flag (frame rate code) which is transmitted with coded data is selected from plural frame rates (frame rate values) with reference to a table shown in figure 13.

Please amend the paragraph beginning on line 15 of page 4 as follows:

~~So~~ As a result, MPEG4 employs a data structure including frame display time data inserted in each ~~frame;~~ frame in order to deal with almost uncountable number of fixed frame rates and, furthermore, to process an image having variable intervals of image display timings or decoding timings of the respective frames.

Please amend the paragraph beginning on line 13 of page 9 as follows:

~~So~~ As a result, such a frame rate is expressed as follows. That is, a prescribed time interval (1 modulo time), for example, one second, is divided into N (N: natural number) to obtain a sub-unit time (1/N) and, using this as a unit of time (1 time tick), the display time of each frame is expressed for both of the image having a variable frame rate and the image having a fixed frame rate.

Please amend the paragraph beginning on line 16 of page 34 as follows:

According to a thirty-fifth aspect of the present invention, there is provided a data storage medium containing an image processing program, and the image processing program is a decoding program which enables a computer to execute the decoding of a coded image signal by the image decoding method of the twenty-third aspect. Therefore, by loading the program in a computer, it is

possible to implement an apparatus that can detect the value of a fixed frame rate of a coded image signal before decoding each frame, and that can simplify the hardware structure at the decoding end.

Please amend the paragraph beginning on line 17 of page 53 as follows:

In the image data structure according to the first embodiment, the display cycle identifier Df is inserted at the beginning of the image data (multiplexed bit stream), and the frame number data Bn or the display time data Dtn is inserted at the beginning of each frame data (code sequence of each frame). However, the display cycle identifier, the frame number data, and the display time data are not necessarily inserted at the ~~beginnings~~ beginning of the corresponding headers. These data may be inserted after synchronous signals or the like as along as the display cycle identifier and the display cycle data are included in the header of the image data (coded image signal) while the frame number data and the display time data are included in the header of the data (code sequence) corresponding to the frame.

Please amend the paragraph beginning on line 9 of page 58 as follows:

In the image coding apparatus 1000a so constructed, the multiplexer (MUX) ~~1102~~ 1120 multiplexes the decoding cycle identifier DEf from the decision unit 1131a, the coded image data Cgn from the encoder 1110, the decoding cycle data DEp from the ON/OFF switch 1141, and the output from the selector switch 1142, and outputs a multiplexed bit stream M1a as a coded image signal having a fixed decoding cycle or a coded image signal having a variable decoding cycle.

Please amend the paragraph beginning on line 22 of page 72 as follows:

Thereafter, it is decided whether or not the object frame F(n) counted in the transmission order is the last frame of the specific image (step ~~S44b~~ S45b). When the object frame is the last frame, the decoding process is ended. When the object frame is not the last frame, the count value n is incremented by 1 (step S46b) and, thereafter, the processes of steps S42b~S46b are repeated until it is decided in step S45b that the object frame is the last frame.

Please amend the paragraph beginning on line 6 of page 74 as follows:

Furthermore, the image decoding apparatus 2200 includes a display unit 2230 which receives the display cycle multiplier data Dm and the display time data ~~Dtn~~ Dyn through the first and second ON/OFF switches 2240 and 2250, respectively, as well as the sub-unit time data Dk and the decoded image data Rg, and performs image display at the prescribed display timing based on these data.

Please amend the paragraph beginning on line 12 of page 75 as follows:

In the display unit 2230, the image of each frame corresponding to the decoded image data Rg having a fixed display cycle is displayed at a prescribed display timing based on the sub-unit time data Dk and the display cycle multiplier data Dm. In this case, the display timing of each frame is the display time h' (n') which is obtained by an arithmetic expression, h' (n') = T x n' (T=(1/N)xM). On the other hand, the image of each frame corresponding to the decoded image data Rg having a variable display cycle is displayed at a prescribed timing based on the display time data ~~Dty~~ Dyn. In this case, the display timing is the display time h(n) which is decided by the display time data ~~Dty~~ Dyn.

Please amend the paragraph beginning on line 4 of page 80 as follows:

The decoding cycle identifier DEf from the decision unit ~~1231a~~ 1131a, the coded data Cgn from the encoder 1110, and the data Dk and DEyn from the first and the third data generators 1232 and 1234a are input to the multiplexer 1220a. Further, the decoding cycle multiplier data DEm from the second data generator 1233a is input to the multiplexer 1220a through the switch 1241a. The multiplexer 1220a multiplexes these data, and outputs a coded image signal having a fixed decoding cycle or a variable decoding cycle as the multiplexed bit stream M2a.

Please amend the paragraph beginning on line 24 of page 87 as follows:

Although ~~in the above description~~ a floppy disk is employed as a data storage medium in the above description, an optical disk may be employed. Also in this case, the coding process or the decoding process can be performed by software in similar manner to the case of using the floppy

disk. The data storage medium is not restricted to the floppy disk and the optical disk, and any medium may be employed as long as it can contain the program, for example, an IC card or a ROM cassette.